

THE REGIONAL DISPARITIES OF THE FDI IN ROMANIA

Danciu Aniela Raluca,
Goschin Zizi and
Gruiescu Mihaela*

Abstract

Following the collapse of communism, the countries of Central and Eastern Europe, have been forging strategies to attract foreign capital as a way of achieving sustained economic growth (Martin and Velázquez, 2000). Foreign direct investment by multinational corporations plays an important role in the transformation of former centrally planned economies into vibrant market systems, since it provides an inflow of capital, management skills, and jobs, alongside increasing exports and transfer of technology. It is also perceived as one of the conditions paving the way for improving the competitiveness of the economy and enhancing the provision of goods and services for the domestic market.

With the implementation of global and regional strategies by multinational corporations, the choice of location is becoming increasingly important, hence requiring a better understanding of the internationalization process and of the factors influencing the spatial distribution of FDI. There are substantial differences in economic performance across regions in virtually every nation. This suggests that many of the essential determinants of economic performance are to be found at the regional level (Porter, 2003, p.550).

In this paper we shall make an analysis of regional disparities of the FDI in Romania using the data provided by the National Trade Register Office of Romania for the period 1991-2008 and National Institute of Statistics.

Keywords: foreign direct investments, regional disparities, multinational corporation, economic development

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1. Administrative Divisions in Romania

After 1990, Romania shifted its spatial policy from a central-based policy to a regional-based policy, in compliance with EU-standards. According to four criteria

* Aniela Raluca Danciu is Professor of Statistics at the Academy of Economic Studies Bucharest, E-mail: anielaco@hotmail.com;

Zizi Goschin is Professor of Statistics at the Academy of Economic Studies Bucharest, E-mail: zizigoschin@hotmail.com;

Mihaela Gruiescu is Associate Professor of Statistics at the Romanian American University in Bucharest, E-mail: mgruiescu@yahoo.com.

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(number of inhabitants, surface, cultural identity and functional-spatial relations); Romania was divided 1998 into eight Development Regions. The eight regions serve as NUTS-II units and as a framework for development policies while the counties serve as NUTS-III units. The NUTS-II units are: **North-East development region** (Bacau County, Botosani County, Iasi County, Neamt County, Suceava County, Vaslui County), **South-East development region** (Braila County, Buzau County, Constanta County, Galati County, Tulcea County, Vrancea County), **South development region** (Arges County, Calarasi County, Dambovit County, Giurgiu County, Ialomita County, Prahova County, Teleorman County), **South-West development region** (Dolj County, Gorj County, Mehedinti County, Olt County, Valcea County), **West development region** (Arad County, Caras Severin County, Hunedoara County, Timis County), **North-West development region** (Bihor County, Bistrita County, Cluj County, Maramures County, Satu Mare County, Salaj County), **Center development region** (Alba County, Brasov County, Covasna County, Harghita County, Mures County, Sibiu County), **Bucharest-Ilfov development region** (Ilfov County, Bucharest).

2. The analyze of the distribution of foreign capital investment on economic development regions

The Bucharest-Ilfov region keeps its primacy in receiving foreign investments, accounting for 57.1% of them and an amount of 15185575.5 thousands USD and a number of 74788 foreign companies in 2008. This situation is motivated by the still precarious transport infrastructure connecting the rest of the country with Europe and the whole world, by the qualified and very skill workforce residing in Bucharest – the capital city is the most important academic center in Romania and the most of the students start working while still studying and thus being motivated to keep working and living in Bucharest after finishing their studies. Another favorable point for the skilled and very well prepared workforce in Bucharest is represented by the professors activating within the universities from Bucharest as well as the very well trained personnel working in all the other companies from the region.

The second most important region for the foreign direct investments flow is the South East region that benefits from transport facilities offered by the Black Sea and the Danube. The most important center in this region are Galati (the city of the steel producer Ispat SIDEX owned by the LMN Holding and of the ship constructor company “Santierul Naval Galati”, the second ship producer in Romania) and Constanta (the second town of the country in terms of population, the most important port in Romania and the fourth European port).

The foreign investors' interest in the Western regions can be noticed, fact can be explained by the greater stability of the foreign capital invested of the Western region compared to the other regions of the country, the lower salaries and leaving standards compare with Bucharest, by the transport infrastructure that has improve lately for this region, the airports in the most important cities in the region being

modernized and connected with the most important cities in the Western Europe, but also by the more Western – like life style and mentality from this region. The most important economic centers in this region are Timisoara (the second developed city of Romania after Bucharest) and Arad.

The other development regions don't have noticeable performances in terms of attracting of foreign direct investments. The main factors can contribute to the raise of FDI flows in these regions are the capital stability and a proper infrastructure.

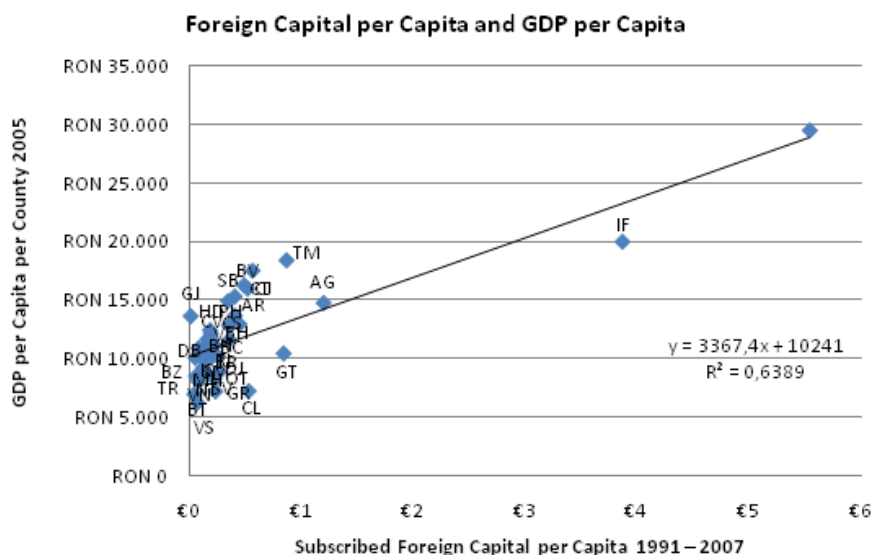
Table 1:

The distribution of the foreign capital investment on economic development regions – 2008

Country	Number of companies		Amount of subscribed capital	
	Number	%	Thousands USD	%
Country	153118	100	26557877.1	100
North East	6647	4.3	1585436.4	5.9
South East	8843	4.8	1719831.1	6.4
South - Muntenia	7206	4.7	2318962.7	8.7
South West - Oltenia	4062	2.7	608659.3	2.2
West	18038	11.8	1631974.9	6.1
North West	17396	11.4	1455436.4	5.4
Center	16138	10.5	2052000.8	7.7
Bucharest-Ilfov	74788	48.8	15185575.5	57.1

Source: http://www.onrc.ro/statistici/is_december_2009.pdf

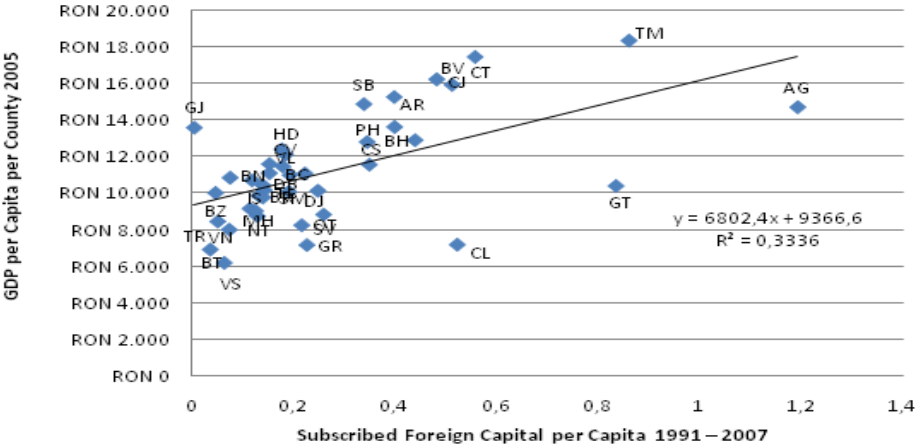
Graph 1: Location Decisions for Foreign Direct Investments in Romania



Source: <http://www.onrc.ro/>

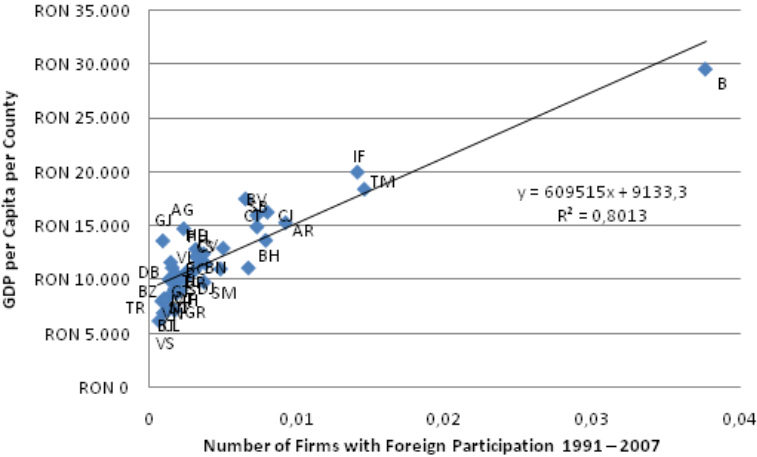
A comparison with former reports suggests that it were continuously the same counties which attracted the lion's share of foreign participation firms. There is – of course – a strong relationship between **FDI** in monetary terms and economic performance (GDP per capita) in Romania but it diminishes once the driving forces Bucharest and Ilfov are removed (cf. Graph 1 and Graph 2). The main outliers are the three counties Călărași, Argeș and Galați. Argeș e.g. is dominated by Automobile Dacia SA, Renault and some other suppliers of the automobile industry such as Draxlmaier or Galați by a huge steel combination and power central.

Graph 2: Location Decisions for Foreign Direct Investments in Romania
Foreign Capital per Capita and GDP per Capita minus B and IF



Source: <http://www.onrc.ro/>

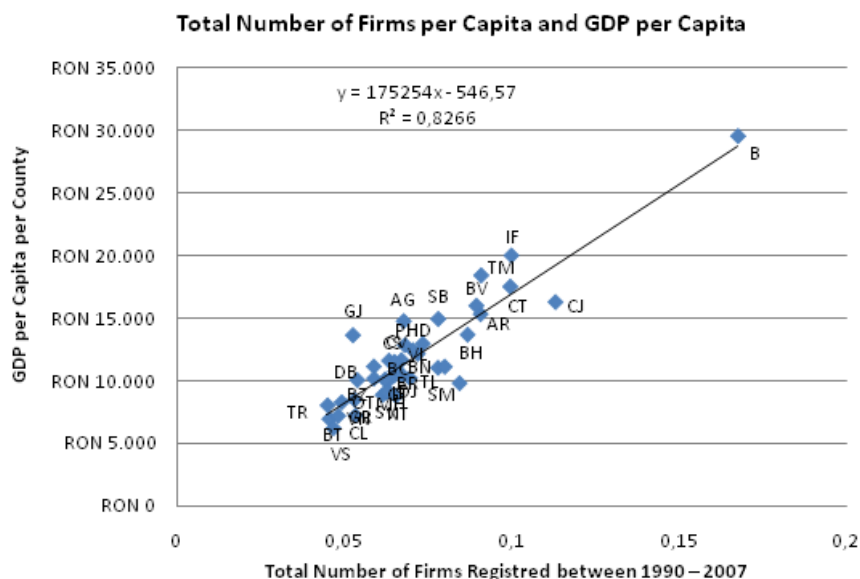
Graph 3: Business in Romania – Location and Investment Decision
Foreign Firms per Capita and GDP per Capita



Source: <http://www.onrc.ro/>

On the contrary, the number of firms with foreign participation per capita in Romania is very unevenly distributed among the counties and a much better predictor for economic well being and attractiveness. Additionally, it provides a relation which remains perfectly stable after the extreme cases like Bucharest and Ilfov are removed ($R^2 = 0.64$), thus the data fit remains even better as of the monetary indicator including Bucharest and Ilfov.

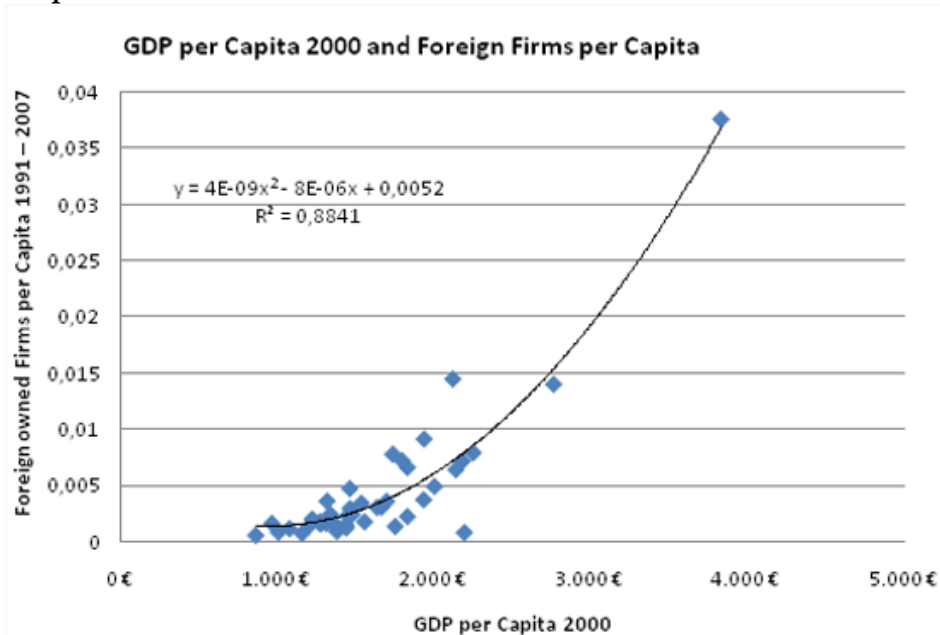
Graph 4: Doing Business in Romania: Drivers of Investment and Location Decisions



Thus, local economic performance and attractiveness to FDI in Romania are better expressed by the number of firms with foreign capital on the local level (NUTS-III), not by the money included. This is quite reasonable as some lagging counties attracted large amounts of foreign capital due to the privatization of the heavy industry (such as the steel and energy sector or the automotive industry). Then again, these activities do not guarantee prosperity for the county as a whole nor seem these counties to be too attractive for other kinds of investors, yet. The pattern persists and even stabilizes with regard to linearity if the total number of firms, both entirely domestic and with foreign participation is taken into account. The total number of firms is captured here again with data from ONRC as registered companies between 1990 and 2008 and adjusted for county population size. A closer look on the counties Călărași, Argeș and Galați reveals now that economic activity is rather low and clearly below the mean what is also reflected in lower per capita GDP. Hence, the monetary large-scale investments there seem to be quite isolated.

Accordingly, regional disparities in terms of attractiveness to **FDI in Romania** on the local level will be measured henceforth as the number of firms with foreign participation (per capita), not in monetary terms. Likewise, overall attractiveness to economic activity in general will be measured as from now on as the total number of firms registered per capita (cf. Graph 4). This is justified as the number of firms seems to be a better indicator for attractiveness and economic performance in Romania than monetary flows, because the latter are distorted by isolated large-scale investments in heavy industries and energy sectors. This is also in line with findings from Kaminski & Ng (2004) and World Bank (2004) which underpinned the importance of SMEs for the Romanian economy and export performance.

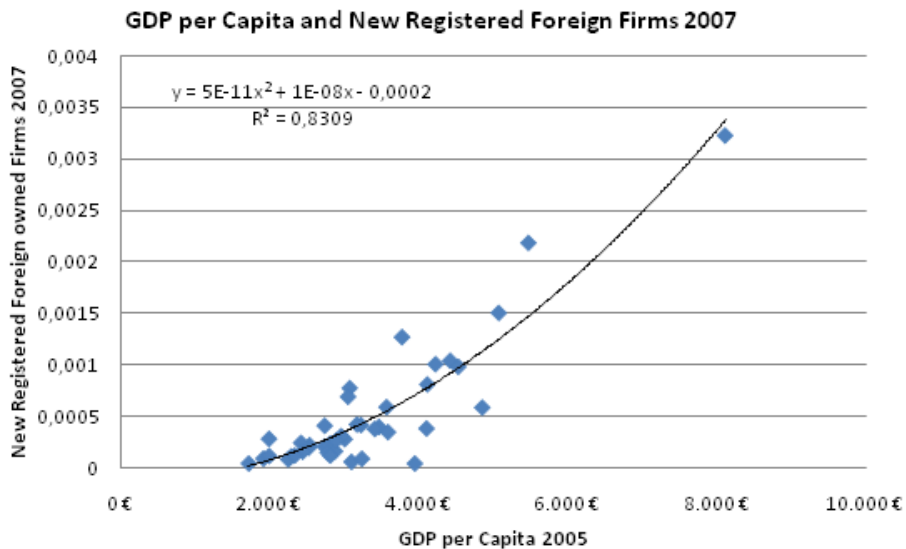
Graph 5: Business Activities in Romania – Location Decision Patterns



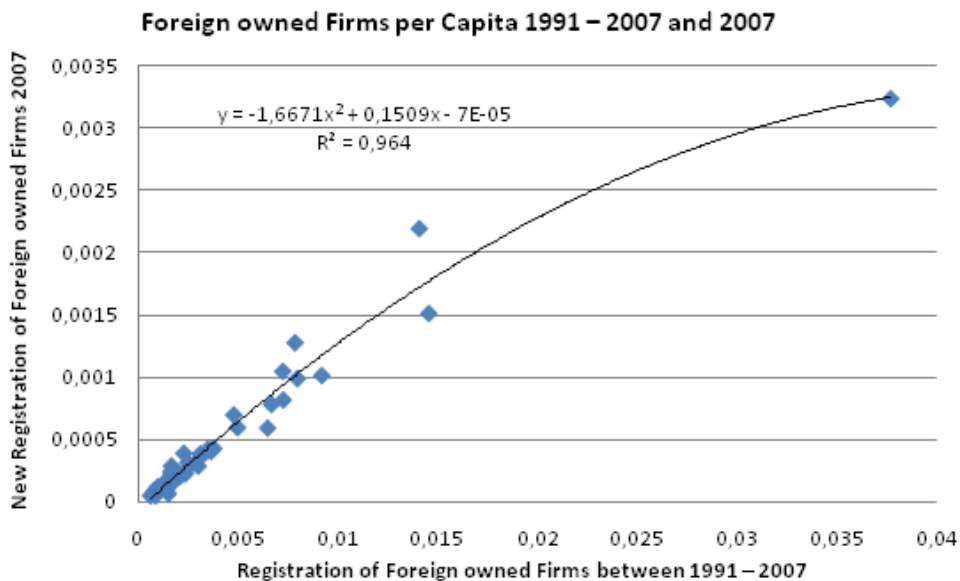
Source: <http://www.onrc.ro/>

An interesting observation to be made in this regard is the confirmation of several business articles which describe foreign economic activity as concentrated in few economic centers, despite labor markets being swept clean and significantly higher salaries for qualified labor and sometimes even for unqualified labor.

One could of course argue that this relationship actually works the other way round. That is to say that per capita GDP is higher because of the higher (foreign) economic activity. But first, this notion would not explain why the respective counties were initially chosen (or avoided) by foreign investors as they were, second, already better developed before and third, the trend still persists as Graph 6 indicates. The registration pattern from 1991 to 2008 correlates almost perfectly with the new registration during 2008 (cf. Graph 7).

Graph 6: Business Activity in Romania – Location Decisions

Source: <http://www.onrc.ro/>

Graph 7: Foreign Companies and Investments in Romania – Location Decisions

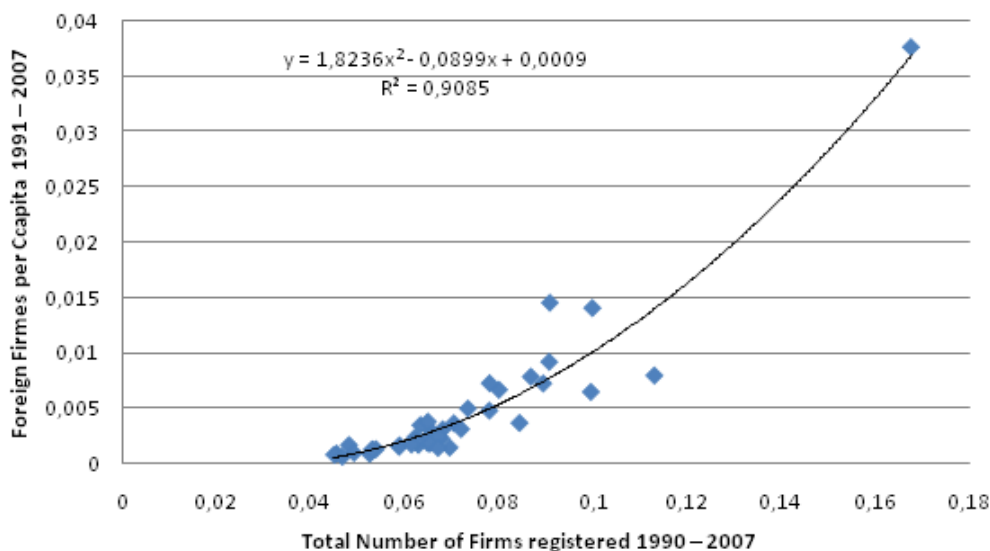
Source: Commission Services (Ameco)

The result of this concentration of economic activity is not only higher GDP per capita for the lucky counties but often also full employment and a sharp concurrence on labor resources. At the same time other counties still feature excess labor force and ought to have a higher MPK judged over their lower GDP per capita

levels. Total economic activity and foreign economic activity are highly but not perfectly correlated. In particular, the relation does not seem to be a strict linear one (cf. Graph 8) even though also a linear model fits well ($R^2 = 0.826$).

Graph 8: Economic Activity in Romania – Location and Investment Decision Patterns

Total Economic Activity and FDI-Activities 1991 – 2007



Source: <http://www.onrc.ro/>

Conclusion

The analysis of the investment's location within Romania shows a very disparate distribution of FDI in the eight development regions. It is mainly due to the very heterogeneous development areas with big cities not so economically diversified, with mono-industrial, small towns, strongly affected by privatization and the restructuring process and with some urban centers that proved their incapacity of becoming development vectors for the area around them. The under developed regions are those where agriculture is predominant, having a great rural population and where transport and the means of communications are very little developed.

The main determinants of the FDI localization at the regional level are the following: the privatization process, the economic development, the low-cost workforce and qualified workforce and the quality of the infrastructure.

References

BEVAN, Alan; ESTRIN, Saul, *The determinants of foreign direct investment in transition economies* (2000), William Davidson Institute, Working Paper 342;

BUCKLEY, Peter J.; CLEGG, Jeremy; WANG, Chengpi e CROSS, Adam R. *FDI, regional differences and economic growth: panel data evidence from China*. Transnational Corporations, vol 11 (1), Abril de 2002 ;

CAMPOS, Nauro F. & KINOSHITA, Yuko. *Why does FDI go where it goes? New evidence from the transition economies*. IMF Working Paper, IMF Institute, Novembro de 2003;

CAVES, R.E. – International Corporations: *The Industrial Economics of Foreign Investment*. *Economica*, vol.38 (February), 1971;

CORNWELL, C. and RUPERT, P. *Efficient Estimation with Panel Data: An Empirical Comparison of Instrumental Variables*. *Journal of Applied Econometrics*, 3: 149-155, 1988;

DUNNING, J. --- *Multinational Enterprise and the Global Economy*. Wokingham: Addison-Wesley, 1993;

DUNNING, John H. *Determinants of foreign direct investment: globalization induced changes and the role of FDI policies*. *Annual Bank Conference on Development Economics*, 2002;

GRANGER, C. *Investigating Causal Relations by Econometric Model and Cross- Spectral Methods*. *Econometrica*, 37: 424-438, 1969;

HOLLAND, Dawn; SASS, Magdolna; BENACEK, Vladimir & GRONICKI, Miroslaw. *The determinants and impact of FDI in central and eastern Europe: a comparison of survey and econometric evidence*. *Transnacional Corporations*, vol 9 (3), Dezembro de 2000;

HSIAO, C. *Analysis of Panel Data*. Cambridge University Press, second edition, 2003;

HYMER, S. - *The International Operations of National Firms: a Study of Direct Foreign Investment*. PhD Dissertation, MIT (publicada por MIT Press, 1976);

LIPSEY, Robert E. *Inward FDI and economic growth in developing countries*. *Transnacional Corporations*, vol 9 (1), Abril de 2000;

TSAI, Pan-Long. *Determinants of Foreign Direct Investment and its impact on economic growth*. *Journal of Economic Development*, vol 19 (1), Junho de 1994;

National Institute of Statistics of Romania, *Statistical Yearbook 2007, 2008*;

National Trade Registry Office, *Companies by FDI Statistical Synthesis of the National's Trade Register's Data on 31 December 2009*, www.onrc.ro/statistici/is_december_2009.pdf.